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10/553,976

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Hiroyuki Tanaka

Q90456

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

HU, HENRY S

ART UNIT

PAPER NUMBER

1796

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DELIVERY MODE

04/22/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/553,976 | Applicant(s) TANAKA ET AL. | |
| | Examiner HENRY S. HU | Art Unit 1796 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment of April 6, 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-9 and 18 is/are pending in the application.
- 4a) Of the above claim(s) 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1,3,5-9 and 18 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. USPTO has received **Amendment** filed on April 6, 2009, which is in response to non-final office action filed on January 5, 2009. With such an amendment, **Claim 7 is amended; Claims 18 is still withdrawn, while no claim is cancelled or added.** To be more specific, only dependent **Claim 7** is amended to overcome claim objection, while parent **Claim 1** is not amended at all.

This Application is from **371/PCT/JP04/05688**. Only **one IDS** (1 page) has been filed so far. **Applicants' Election on Group I (Claims 1, 3 and 5-9) is made without traverse.** **Claims 1, 3, 5-9 and 18 are now pending with two independent claims (Claim 1 and Claim 18),** while non-elected Group II (Claim 18) is still withdrawn from consideration. An action follows.

DETAILED ACTION

Response to Argument

2. Applicant's argument filed on April 6, 2009 has been fully considered but they are not persuasive. The focal arguments related to the patentability will be addressed as follows: Such an amendment involves only on dependent **Claim 7** to overcome claim objection, while the only one pending parent **Claim 1** is not amended at all. Therefore, exactly the same scope is still applied to parent Claim 1. After a very close consideration, 103 rejections are all sustained with the same ground of rejection. **Final action is thereby applied** as follows:

Claim Rejections - 35 USC § 103

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. The limitation of parent **Claim 1** of the present invention relates to **a fluorine-containing elastomer composition for a seal material of a semiconductor production device.** It comprises **two** components including: (A) a fluorine-containing elastomer and (B) a compound having plasma anti-aging effects,

wherein said compound (B) having plasma anti-aging effects is at least one selected from the group consisting of an **isoindolinone** pigment, a **quinacridone** pigment, a **diketopyrrolo-pyrrole** pigment and an **anthraquinone** pigment.

See other limitations of dependent **Claims 3 and 5-9.**

5. **Claims 1, 3 and 6-9 are rejected** under 35 U.S.C. 103(a) as being obvious over **Kawaguchi** et al. (US 6,642,300 B1 or its equivalent EP 1,182,230 A1), **Masaki** et al. (JP 2002-161264), **Goebel** et al. (EP 432,911A1), **or Michio** et al. (JP 05-279535) in combination or alone in view of **Tseng** et al. (US 6,870,662 B2) for the reasons set forth in paragraphs **6-9** of office action dated 1-5-2009 as well as the discussion below.

6. **Claim 5 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi et al. (US 6,642,300 B1 or its equivalent EP 1,182,230 A1), Masaki et al. (JP 2002-161264), Goebel et al. (EP 432,911A1), or Michio et al. (JP 05-279535) in combination or alone in view of Tseng et al. (US 6,870,662 B2), **and further in view of Hayashida** et al. (US 7,323,515 B2) for the reasons set forth in paragraphs **10-11** of office action dated 1-5-2009 as well as the discussion below.

7. As discussed in Non-Final action filed on January 5, 2009, all **four** involved references are cited as “X” references in international search report for Applicants’ priority document **PCT/JP2004/005688**. Regarding “**fluorine containing elastomer composition**” to be useful for making a seal material of a semiconductor production device in twice-amended parent **Claim 1**, the composition comprises two components including: (A) a fluoroelastomer and (B) a compound having plasma antiaging effects. Said compound (B) having plasma anti-aging effects is at least one selected from the group consisting of **isoindolinone** pigment, **quinacridone** pigment, **diketopyrrolo-pyrrole** pigment, and **anthraquinone** pigment._

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8. Each of **Kawaguchi, Masaki, Goebel and Michio** has already disclosed the making of **some vulcanizable fluoropolymer compositions** to be suitable to make **seal, gasket, O-ring and the related products**, while in most of the cases the articles are designed for plasma-resistance and/or heat aging-resistance. However, Kawaguchi, Masaki, Goebel and Michio in combination or alone is still silent about adding a pigment compound (having plasma anti-aging effects) as filler to the composition, which is specifically selected from **isoindolinone**, **quinacridone**, **diketopyrrolo-pyrrole** and **anthraquinone**.

9. According to Tseng's disclosure, the polymer composition can be readily colored by a solution of dyes or pigments such as anthraquinone dyes, quinacridone dyes and the like pigments. By doing so, the plasma resistance is found to improve due to the generation of positively charged polymer and negatively charged pigment particles (see abstract, line 1-3; column 2, line 23-41. Even Tseng's pigment is used to modify the electrophoretic display cell surface (see Applicants' key argument on page 6 at top section of Remarks); at least some pigment will stay with and/or on the surface area. Attention is directed to the fact that Claim 1 only requires the composition to comprise a fluoroelastomer and a claimed pigment compound. Open language "comprising" is applied, while it does not specify at all how the pigment compound is dispersed within the fluoroelastomer. The scope of Parent Claim 1 certainly includes the pigment obtained by surface-coating or surface-penetration.

10. With respect to Applicants' other argument as "no plasma antiaging effect is mentioned by Taeng" on page 6 at bottom of Remarks, the issue of "inherent property" can be applied here.

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It is a fact that at least some of Tseng's pigments are within the scope of parent Claim 1. For instance, see column 4, line 63 – column 5, line 23; particularly see anthraquinone (blue, yellow 114, reds 111 or 135), and quinacridone at column 5, line 3-5 and 19-22.

11. In summary, current Claim 1 only requires the composition to comprise a fluoroelastomer and a claimed pigment compound. It does not specify at all how the pigment compound is dispersed within the fluoroelastomer. 103 rejections are thereby all sustained with the same ground of rejection. **Final action is thereby applied.** Amendment on parent Claim 1 is suggested accordingly.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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13. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Dr. Henry S. Hu whose telephone number is (571) 272-1103**. The examiner can be reached on Monday through Friday from 9:00 AM –5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Vasu Jagannathan, can be reached on (571) 272-1119. The **fax** number for the organization where this application or proceeding is assigned is **(571) 273-8300** for all regular communications. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Peter D. Mulcahy/
Primary Examiner, Art Unit 1796

/Henry S. Hu/
Examiner, Art Unit 1796

April 20, 2009